

Technology Management Division

Schafer Corporation

Arlington, Virginia

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Small Unit Operations: Situational Awareness System Program Support

By
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FINAL Report
October 2001 – June 2003

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Abstract

This is the final report for Schafer Corporation support provided to the Small Unit Operations: Situational Awareness System between October 2001 and June 2003. This report covers the work accomplished by *Team Schafer* (Schafer Corporation, Adroit Systems International, David P. Maunder Consulting). *Team Schafer* supported DARPA with programmatic and technical assistance support.

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1.0 Introduction

Team Schafer supported the Advanced Technology Office (ATO) of the Defense Advanced Research Project Agency (DARPA) with their responsibilities to develop and transition advanced technologies and concepts for effective, survivable, affordable, and dependable military systems.

This Science and Engineering Technical Assistance (SETA) support task provided technical, programmatic and administrative support for the successful execution of the Small Unit Operations: Situational Awareness System (SUO: SAS) program.

1.1 Small Unit Operations: Situational Awareness System

The Small Unit Operations: Situational Awareness System (SUO: SAS) program was intended to provide mobile communications systems capable of delivering a high data-rate capacity while optimized for restrictive terrain. The SUO: SAS program approach was to develop an integrated, very high capacity, Low Probability of Detection (LPD) communications system utilizing a variety of waveforms with self-configuring networking. Users include the Army, the Marines, and the Special Operations Forces, and CECOM was a transition partner in the effort.

2.0 Task Objectives

Team Schafer was tasked to assist the DARPA Advanced Technology Office (ATO) in achieving their objectives for SUO: SAS Program efforts. It provided scientific, engineering, technical, programmatic, and administrative support for DARPA systems engineering efforts. The Team's administrative support consisted of that administrative support necessary to perform the technical tasks under this contract. Team members were proactively employed to interact with the contractors and program team to conduct analyses that predicted program performance capabilities and identified potential problems to obviate performance shortfalls. *Team Schafer* performed the following functions:

- Research and Development
 - Test and Evaluation support
 - Systems Engineering support
 - Strategic Technology Planning support
- Management, Administrative, and Professional Support Services
 - Program Planning and Control
 - Performance Measurement
 - Facilities and Logistics Support
 - Administrative Program Support
 - Transition Plan/Schedule/Phasing

- Coordination and Sponsoring of Program Reviews and Workshops
- Principal Investigator Meeting and Technical Conference Planning and Support

2.1 Research and Development

For the SUO: SAS Program, *Team Schafer* assisted the DARPA PM in coordinating program reviews, as well as providing support and assessment of program demonstrations. *Team Schafer* further assisted the DARPA PM with systems engineering support by monitoring and evaluating program and systems engineering processes. *Team Schafer* participated in systems engineering meetings and helped to ensure that good engineering practices were followed.

2.2 Management and Professional Support Services

Team Schafer supported the PM's efforts for program planning and control by:

- conducting regular program planning and strategy sessions with the PM and with program technical and financial support staff,
- providing technical and program management support such as conducting in-depth technical and programmatic troubleshooting and risk analyses of program projects, reviewing monthly business reports for management and technical issues and providing monthly assessments to the PM., and
- providing financial support and financial management efforts, as directed by the PM, such as preparing Procurement Guidance packages, tracking financial commitments and obligations, and interfacing with performing activities to track expenditures.
- assisting in the coordination and conducting of quarterly reviews with contractors/government agencies funded by the program.

In the area of facilities and logistics support, *Team Schafer* provided, upon request, rooms for meetings as well as web hosting and development. *Team Schafer* hosted Review Meetings (e.g., quarterly financial and technical reviews), and workshops. It participated in planning meetings by developing, setting up and executing the demonstration plans using various subject matter experts to evaluate and demonstrate collaboration/visualization technologies; handling site logistics for participants and guests; and ensuring follow-up actions were performed.

3.0 Technical Problems

Team Schafer did not encounter any technical barriers when conducting its tasking.

4.0 General Methodology

Team Schafer worked within DARPA processes and procedures in supporting the programs. Technology transfer direction was initiated by the DARPA PM and then augmented by *Team Schafer* support.

5.0 Significant Hardware Development

Team Schafer did not develop any hardware.

6.0 Special Comments

The descriptions of the DARPA support herein are applicable to the support *Team Schafer* provided to the DARPA Advanced Technology Office on Delivery Order 0007.

7.0 Implications for Further Research.

None.

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